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Editorial

Economic evaluation of OT services: Guidance and opportunities

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Overview

The Royal College of Occupational Therapists recently published its pivotal 'vision for Occupational Therapy research in the UK over the next decade' (Royal College of Occupational Therapists, 2020). This identifies 'What is the cost-effectiveness of Occupational Therapy services' as being a key research priority. Despite this current focus, recent systematic reviews of OT services (e.g. CADTH, 2017; Green and Lambert, 2017; Hung and Fong, 2019; Nagayama et al., 2016; Rahja et al., 2018) have found few cost-effectiveness studies. As well as this research priority for OT, there is a more general drive to improve health and social care through evidence-based guidance with an increasing interest among health technology agencies to apply economic evaluation to health and social care services. The National Institute for Health and Care Excellence (NICE) (2019) and the Dutch National Health Care Institute (Zorginstituut Nederland, 2016), for example, now provide decision makers with objective evidence to inform decisions about the value of different health and social care services.

The people who make the decisions about commissioning or delivering health and social care services need to consider the relative value of different services, given the constrained budget they face. There are escalating demands on service providers to show clinical benefit and the cost-effectiveness of services in order to demonstrate value for money. In the UK, the NHS offers services to users free at the point of delivery but with finite public funds and resources that need be utilised for the health benefit of its citizens. From an NHS health care perspective, the decision to invest in a particular health care service impacts the health of NHS patients served, but also impacts the health care service resource use and costs as they will be utilised to provide that service instead of another. There are unseen impacts: a decision to invest in one service compared to another means foregone (lost) potential to generate health through the alternative, unfunded activity. Economic evaluation provides a framework to combine these impacts by assessing the costs and effects of two (or more) competing, alternative interventions or services against other uses if the same resources were employed elsewhere in the NHS (Drummond et al., 2015), as shown in Figure 1.

OTs play a vital role within multiple settings including the NHS, social care and mental health by offering practical support to empower individuals to recover and overcome barriers preventing them from carrying out meaningful activities. The concept of evidence-based practice (EBP) has long been embedded within professional training and practice of OTs as highlighted in COTs' Royal College of Occupational Therapists (2021). This takes into account the integration of the best available research evidence alongside the practitioner's clinical expertise and the service user's values and goals. Further to this, the professional ethos of OTs aligns strongly with the UK Department of Health and Social Care's policy initiatives to support and enable individuals to function at their optimum level and to live independently within the community where that is their preference. The emergence of COVID-19 has further heightened this situation with both the increase in the number of patients in hospital with complex comorbidities and those requiring ongoing support at home once discharged from hospital. OTs are extremely well placed to contribute to meeting this need by offering health and social care services which are both cost-effective but also meaningful to service users' overall quality of life.

The purpose of writing this editorial is to offer guidance on economic evaluation of OT services and to reflect on opportunities for further research in the field. To date, only one economic evaluation of OT services was published in BJOT in the last 6 years. This article examined the cost-effectiveness of OT home visits after stroke compared to a hospital-based interview (Sampson et al., 2014). It has been quite widely cited and clearly demonstrates the potential value of carrying out an economic evaluation alongside a research study where a need is identified. Such evidence is essential to convey the value that OT services offer.

Economic evaluation methods

Economic evaluation methods are widely established and used to inform decisions (Drummond et al., 2015). NICE publishes national guidance using evidence on effectiveness and cost-effectiveness of interventions such as OT services, as

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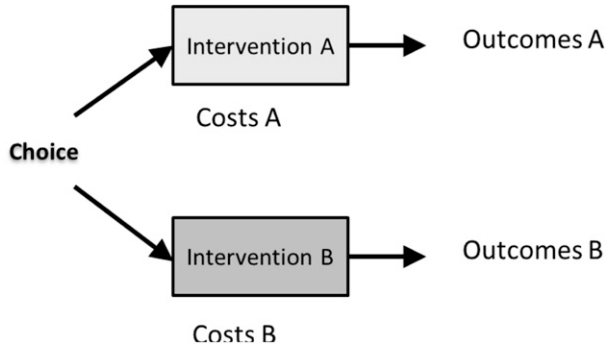

Figure 1. Cost-effectiveness analysis as comparative evaluation.

well as a reference case specifying the methods for estimating clinical and cost effectiveness (PMG20). Published guidelines on OT services include mental well-being in over 65s https://www.nice.org.uk/guidance/ph16, end-of-life care https://www.nice.org.uk/guidance/ng142/documents/evidence-review-27 and management of falls https://www.nice.org.uk/guidance/cg161/evidence/falls-full-guidance-190033741.

Cost–utility analysis is a form of cost-effectiveness analysis. Comparing two or more competing interventions or services, outcomes are expressed by combining the quantity of time spent in a health state by the 'quality' of the health state using quality-adjusted life years (QALYs) (EuroQol group, 1990). One year in full health is equivalent to one QALY. An advantage of using QALYs is that they offer a generic rather than disease-specific approach to outcome measurement and therefore enable comparison of results across all health care interventions, regardless of the disease or intervention evaluated.

Using this measure, if the outcomes are better for one intervention (say, a new intervention A) over another (say, the standard, current intervention B) and have lower costs, then intervention A is cost-effective. If, on the other hand, intervention A has better (or lower) outcomes and has higher (or lower) costs, additional information is required. In terms of NICE, a ceiling, cost-effectiveness threshold value of £20,000 (to £30,000) per QALY is typically used. This figure represents the maximum additional cost per QALY gained at which NICE finds this intervention is cost-effective and thus worth investing in. At its core, it means 1 year of full health, that is a QALY, is valued at £20,000.

Since 2012, NICE has moved beyond focussing only on the direct health interventions but also to take into account the non-health outcomes in the public sector and other settings. This includes providing guidance for the economic evaluation of interventions with a social care focus where the criteria for including resource use, costs and outcomes tend to be broader. For example, an evaluation undertaken from the perspective of a local authority (LA) commissioner is likely to consider broader outcomes, such as social care–related quality of life, and resource use and cost implications falling on the LA budget.

Reflections on economic evaluation of OT services

There has been a very clear increase in the use and requirement of EBP to inform decision makers (COT guidance and NICE) and to support more effective use of resources. Alongside this, there has been increasing policy focus on provision of preventative care, care in the community and care to support people's independence at home. This requires information on evidence relevant to resource use, costs and outcomes relating to OT services that have an impact on health as well as the wider context. Cost-effectiveness information has direct relevance for commissioners and other decision makers who aim to enhance the health (and well-being) of the individuals whilst still having to manage within their own budgets.

In order to support research activity and improve its benefit to the public, greater emphasis is being placed on being research active and incorporating information on cost and clinical effectiveness as well as other wider societal care outcomes. There is an increasing need for OT services arising from the COVID-19 pandemic, such as in the acute setting but also in mental health and community services exacerbated by social isolation from shielding and social distancing restrictions. OTs are, thus, crucially placed to provide clinical and cost effective contributions in supporting the public, particularly in these unprecedented times. Now more than ever, this activity should be demonstrated through robust evaluation of the costs as well as outcomes generated through use of OT services.

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References

CADTH (2017) *Occupational Therapy for Chronic Pain Management Using the Biopsychosocial Approach: A Review of the Clinical and Cost-Effectiveness and Guidelines*. Ottawa: CADTH.

Drummond MFD, Sculpher MJ, Claxton KP, et al. (2015) *Methods for the Economic Evaluation of Health Care Programmes*. 4th edition. Oxford. Oxford University Press.

EuroQoL Group (1990) EuroQoL – a new facility for the measurement of health-related quality of life. *Health Policy* 16: 199–208.

Green S and Lambert R (2017) A systematic review of health economic evaluations in occupational therapy. *British Journal of Occupational Therapy* 80(1): 5–19.

Hung G and Fong K (2019) Effects of telerehabilitation in occupational therapy practice: a systematic review. *Hong Kong Journal of Occupational Therapy* 32(1): 3–21.

Nagayama H, Tomori K, Ohno K, et al. (2016) Cost-effectiveness of occupational therapy in older people: systematic review of randomized controlled trials. *Occupational Therapy International* 23: 103–120.

National Institute for Health and Clinical Excellence (2014) *Developing NICE Guidelines: The Manual: Pmg20*. London: National Institute for Health and Care Excellence.

Rahja M, Comans T, Clemson L, et al. (2018) Economic evaluation of occupational therapy approaches for people with cognitive and/or functional decline: a systematic review. *Health and Social Care in the Community* 26: 635–653.

Royal College of Occupational Therapists(2020) *Top 10 priorities for occupational therapy research in the UK*, file:///C:/Users/speedy/Downloads/Top%2010%20priorities%20for%20occupational%20therapy%20in%20the%20UK.pdf

Royal College of Occupational Therapists (2021) *Professional standards for occupational therapy practice, conduct and ethics*.

Sampson C, James M, Whitehead P, et al. (2014) An introduction to economic evaluation in occupational therapy: cost-effectiveness of pre-discharge home visits after stroke (HOVIS). *British Journal of Occupational Therapy* 77(7): 330–335.

Zorginstituut Nederland (2016) *Guideline for Economic Evaluations in Healthcare*. DEFINITIEF 16.6.16.